

WHAT IS CLAIMED IS:

1. A test socket for testing electrical characteristics of a semiconductor device by connecting probes, arranged in a grid-like form, with outer  
5 connecting terminals of the semiconductor device, arranged in a grid-like form, and electrically connecting the probes with the outer connecting terminals comprising:

a connecting sheet, made of an electrically  
10 deformative insulating material, and having electrodes for electrically connecting the probes to the outer connecting terminals of the semiconductor device wherein a plurality of protrusions, formed into a smooth curved surface, and a plurality of recesses, formed into a  
15 smooth curved surface and extending in the vicinity of the protrusions, are formed in the electrodes of the connecting sheet, being in contact with the outer connecting terminals of the semiconductor device.

2. The test socket according to claim 1,  
20 wherein the electrodes of the connecting sheet are electrodes being in contact with probes, and electrodes being in contact with the outer connecting terminals of the semiconductor device, and

the two types of the electrodes are connected  
25 through electrically connecting holes, formed in the elastically deformative insulating member and located on

a front surface and a back surface of the connecting sheet.

3. The test socket according to claim 1,  
wherein a shape of tips of the probes, being in  
5 contact with the electrodes of the connecting sheet, is  
like a recess or a protrusion, and  
the electrodes are shaped like a protrusion, which  
can be engage with the probes of the recess-like shape  
or a recess, which can be engaged with the probes of the  
10 protrusion-like shape.

4. A test socket having a circuit board, which  
transmits an electrical signal for testing electrical  
characteristics of a semiconductor device to outer  
connecting terminals of the semiconductor device,  
15 arranged in a grid-like form, and receives the  
electrical signal from the outer connecting terminals,  
and transmits the electrical signal to a testing  
equipment and receives the electrical signal from the  
testing equipment, comprising:  
20 a connecting sheet, made of an elastically  
deformative insulating member and having electrodes for  
electrically connecting the circuit board with the outer  
connecting terminals of the semiconductor device wherein  
a plurality of protrusions, formed into a smooth curved  
25 surface, and a plurality of recesses, formed into a  
smooth curved surface and extending in the vicinity of  
the protrusions, are formed in the electrodes of the

connecting sheet, being in contact with the outer connecting terminals of the semiconductor device.

5. The test socket according to claim 4,  
wherein the electrodes of the connecting sheet are  
5 electrodes, being in contact with the circuit board, and  
electrodes, being in contact with the outer connecting  
terminals of the semiconductor device,  
the two types of the electrodes are connected  
through electrically connecting holes, formed in the  
10 elastically deformative insulating member, and  
connecting wires, and are located on a front surface and  
a back surface of the connecting sheet, and  
a distance between the electrodes, being in contact  
with the circuit board, and a distance between the  
15 electrodes, being in contact with the outer connecting  
terminals of the semiconductor device, are different.

6. The test socket according to claim 1, further  
comprising:  
a guiding member having holes at positions  
20 corresponding to the outer connecting terminals of the  
semiconductor device and overlapping the connecting  
sheet.

7. The test socket according to claim 4, further  
comprising:

a guiding member having holes at positions corresponding to the outer connecting terminals of the semiconductor device and overlapping the connecting sheet.

5           8.    The test socket according to claim 1,  
              wherein the electrodes of the connecting sheet,  
being in contact with the outer connecting terminals of  
the semiconductor device, have a spaced portion and a  
bending portion, and  
10           the bending portion is in contact with the outer  
connecting terminal of the semiconductor device.

              9.    The test socket according to claim 4,  
              wherein the electrodes of the connecting sheet,  
being in contact with the outer connecting terminals of  
15           the semiconductor device, have a spaced portion and a  
bending portion, and  
              the bending portion is in contact with the outer  
connecting terminal of the semiconductor device.

              10.   The test socket according to claim 1,  
20           wherein a through hole is formed in a part of the  
connecting sheet.

              11.   The test socket according to claim 4,  
              wherein a through hole is formed in a part of the  
connecting sheet.

12. The connecting sheet included in the test socket according to claim 1.

13. The connecting sheet included in the test socket according to claim 2.

5           14. The connecting sheet included in the test socket according to claim 3.

15. The connecting sheet included in the test socket according to claim 4.

10           16. The connecting sheet included in the test socket according to claim 5.